

CLASSIFICATION OF THE FOSSORIAL, PREDACEOUS AND
PARASITIC WASPS, OR THE SUPERFAMILY
VESPOIDEA.BY WILLIAM H. ASHMEAD, M. A., D. SC., ASSISTANT CURATOR, U. S.
NATIONAL MUSEUM.

(Paper No. 18.—Continued from Vol. XXXV., p. 332.—Conclusion.)

SUBFAMILY II.—Ephutinae.

This subfamily is readily separated from the *Mutillinae* by the difference in the abdomen, both sexes having the first segment much narrowed, or petioliform, and separated from the second by a more or less distinct constriction or furrow; it is never broadly sessile with the second as in the *Mutillinae*.

The group is based upon the genus *Ephuta*, Say, as I have restricted it, but not as defined by André. Say, in his original brief description, designated no type for the genus, but placed under it *three* species, namely, *Mutilla erythrina*, Klug; *M. scrupea*, Say, and *M. gibbosa*, Say. When I recognized the genus I designated as the type *E. scrupea*, Say, the only species I knew in both sexes. As I was the first to designate a type for it, my views should prevail; in fact, must prevail under the rules of zoological nomenclature.

The genus *Rhoptromutilla*, André, is *Ephuta*, Say, as I defined it under a new name.

Of my genus *Allomutilla* Mr. André says: "Ce genre a été fondé par Ashmead sur le ♂ de *D. melicerta*, a Smith, qui d'après l'auteur cité, présenterait cette particularité d'avoir les deux nervures récurrentes recues par la seconde cellule cubitale, or cette assertion est erronée, car chez le ♂ en question dont j'ai pu examiner plusieurs exemplaires, les nervures récurrentes sont recues comme d'ordinaire, par le 2e et 3e cellules cubitales."

My definition is correct, and André's several examples of *M. melicerta*, Smith, probably represent some other species. Radoszkowski, in *Horæ Soc. Ent., Rossicæ*, Vol. VI., 1869, Pl. 10, Fig. 4, gives a good figure of *M. melicerta*, Smith, and if Mons. André will consult this figure he will see that *the second cubital cell receives both recurrent nervures*, as I have stated. Another species figured by Radoszkowski, *Mutilla egregia*, Klug, also has the same venation and will fall into *Allomutilla*, Ashmead.

The subfamily *Ephutinae* is divided into two tribes as follows :

Table of Tribes.

- Eyes never rounded or hemispherical, but always ovate, obovate or ellipsoidal, not polished, and distinctly faceted, as in the tribe *Mutillini*.....Tribe I., Ephutini.
- Eyes rounded or hemispherical, very prominent and highly-polished, not faceted, or the facets very indistinctly defined, as in the tribe *Photopsidini*.....Tribe II., Sphaerophthalmini.

Tribe I.—Ephutini.

Table of Genera.

- Males 1.
- Females 9.
1. Eyes distinctly emarginate within..... 2.
- Eyes *not* emarginate within 4.
2. Metathorax with the hind angles normal, not dentate ; scutellum normal, not spined..... 3.
- Metathorax with the hind angles dentate, clothed with a dense silvery-white pubescence ; scutellum bispined. (North and South America) Ephutopsis, Ashm., gen. nov.
- (Types *E. trinidadensis*, Ashm., and *M. odontophora*, Cam.)
3. Second and third cubital cells each receiving a recurrent nervure.
- Scape bicarinate beneath, the first and second flagellar joints transverse, or not longer than thick ; first segment of abdomen petioliform, as wide at base as at apex. (North and South America.)..... Ephuta, Say.
- = Rhoptromutilla, André.
- (Type *E. scrupea*, Say.)
- Scape (?) not bicarinate beneath ; first segment of the abdomen narrowed anteriorly, nodiform posteriorly.
- (Africa.) Rhopalomutilla, André.*
- (Type *R. clavicornis*, André.)
- Second cubital cell receiving both recurrent nervures ; scape normal..... Allomutilla, Ashmead.
- (Type *Mutilla melicerta*, Smith.)
4. Front wings with *three* cubital cells, or the third partially formed... 5.
- Front wings with *two* cubital cells, the third entirely absent..... 6.

*I have not seen a specimen of this genus, and am not positive of its position in this tribe.

5. Middle and posterior tibiae *not* spinous ; second ventral segment with a longitudinal impresssion on each side filled with a dense pubescence. (Europe, Africa and Asia.) *Stenomutilla*, André.
(Type *Mutilla argentata*, Villiers.)
- Middle and posterior tibiae spinous ; second ventral segment normal.
(Europe, Africa and Asia.) *Dasylabris*, Radoszowski.
(Type *Mutilla arenaria*, Fabr.)
6. Head normal, unarmed 7.
Head abnormally large, quadrate, armed on each side beneath with a tooth or spine, the hind angles acute or straight 8.
7. Stigma in front wings indistinct ; mesonotum *without* furrows, or the furrows only slightly indicated ; first joint of the flagellum shorter than the second *Dasylabris*, Radoszk. (partim.)
Stigma in front wings well developed ; mesonotum *with* distinct furrows. (Europe and North Africa.) *Cystomutilla*, André.
(Type *Mutilla ruficeps*, Smith.)
8. Marginal cell squarely truncate at apex ; second recurrent nervure subobsolete ; first joint of the flagellum longer than the second.
(North and South America.) *Hoplomutilla*, Ashmead.
(Type *Mutilla cephalotes*, Swederus.)
9. Thorax obpyriform, ovate or ovoid ; head not unusually large . . . 10.
Thorax banjo-shaped, or nearly ; head very large, quadrate, about twice as wide as the thorax 16.
10. Pygidium smooth, *without* a pygidial area, or at most the area only slightly indicated, rarely finely, sparsely punctate 11.
Pygidium not or rarely smooth, opaque, striate or rugulose, always *with* a distinct pygidial area 14.
11. Thorax bare, or with only a few sparse hairs ; eyes ovate or oval ; first abdominal segment petioliform, as wide at base as at apex ; metathoracic spiracles round or short oval 12.
Thorax not bare, densely pubescent above ; eyes ellipsoidal or short oval ; first abdominal segment subnodose at apex ; metathoracic spiracles long, linear 13.
12. Head transverse, much wider than the thorax, the temples obliquely narrowed ; eyes rather large, oval *Ephutopsis*, Ashmead.
Head transverse or subglobose, not much wider than the thorax ; eyes ovate or oval ; flagellum not long, either subclavate or clavate, the first joint transverse, a little shorter than the second, the following short, wider than long ; hind tibiae with a few sparse hairs *Ephuta*, Say.

13. Head subglobose ; flagellum filiform, the first joint obconical, longer than the second, the following joints longer than thick ; mandibles with a tooth within before apex.....Stenomutilla, André.
14. Thorax longer, obpyriform or obovate.....15.
Thorax short, obovoid, above bare or nearly ; metathoracic spiracles (?) oval ; mandibles bidentate ; abdomen red and black, with the first segment petioliform, of an equal width throughout.....Allomutilla, Ashmead.
15. Thorax bare ; head subquadrangular ; eyes very small, placed towards the middle of the sides of the head ; antennæ very short, strongly clavate, the joints of the flagellum wider than longRhopalomutilla, André.
Thorax usually densely pubescent, the metathoracic spiracles long oval ; mandibles tridentate at apex, or with one or two teeth within before the apex ; antennæ neither very short nor strongly clavate, the first joint of the flagellum longer than the second ; abdomen usually spotted with silvery-white or golden pubescent spots, the petiole short, widest behind.....Dasylabris, Radoszkowski.
16. Head with the hind angles acute or dentate, armed beneath with *four* teeth, *i.e.*, two small teeth at base of gula and a large tooth on each side behind these ; mandibles bidentate, the lower tooth much the longer.....Hoplomutilla, Ashmead,

Tribe II.—Sphaerophthalmini.

The members of this tribe exhibit the strongest affinity with those in the tribe *Photopsidini*, and many females are easily confused with some in the latter.

The closest attention, therefore, must be given to the difference in the shape of the first abdominal segment, made use of in separating the tribes, before they can be recognized.

Table of Genera.

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|---|-------------------------------------|
| Males | 1. |
| Females | 7. |
| 1. Fully winged | 2. |
| Subapterous or with rudimentary wings. | |
| Thorax ovoid, coarsely sculptured, or rugosely punctured, with a black pubescence ; head rather large, quadrate, wider than the thorax ; eyes small, rounded ; mandibles 3-dentate ; first joint of the flagellum not short, but hardly longer than the second. (North America.)..... | Pycnomutilla, Ashm., gen. nov. |
| | (Type <i>Mutilla waco</i> , Blake.) |

2. Front wings with only *two* cubital cells..... 3.
Front wings with *three* cubital cells, or the third partially formed.. 7.
3. Marginal cell at apex broadly truncate..... 4.
Marginal cell at apex pointed or rounded, never truncate.
4. Mandibles at apex broad and 3-dentate..... 5.
Mandibles at apex never broad nor 3-dentate, at the most bidentate 6.
5. Body bare, or nearly; second dorsal abdominal segment not black,
red or marked with red or yellow spots. (North and South
America.)..... Sphaerophthalma, Blake.
= Traumatomutilla, André.
(Type *S. scaeva*, Blake.)
Body not bare or nearly, usually very hairy or pubescent; second
dorsal abdominal segment usually black or unicolorous, not spotted
with red or yellow. (North and South
America)..... Dasymutilla, Ashmead.
(Type Sphaeroph. *gorgon*, Blake.)
6. Body well pubescent or hairy, the abdomen black, with a white
hair-band; first joint of the flagellum shorter than the second.
(South America.)..... Reedia, Ashm., gen. nov.
(Type Mutilla *atripennis*, Spinola.)
7. Thorax obpyriform or obovate, or at least always narrowed
posteriorly.
Mandibles at apex *not* 3-dentate, edentate, or with a small tooth
within some distance from the apex, or bidentate..... 8.
Mandibles at apex obliquely truncate and 3-dentate.
First joint of the flagellum obconical, but not twice as long as
the second; head and thorax usually black, with a sparse
black pubescence, rarely with the head red; second
abdominal segment mostly red.... Pycnomutilla, Ashmead.
8. Body bare or nearly, never densely pubescent, or hairy, usually
rugosely punctured; scape rather long, slightly bent, the first
joint of the flagellum longer than the second; second abdominal
segment marked with from 2 to 4 red or yellow spots, rarely
immaculate..... Sphaerophthalma, Blake.
= Traumatomutilla, André.
Body *not* bare, but clothed with dense long hairs or densely
pubescent, or the head and thorax above with a dense pubescence;
second abdominal segment usually black or the *derma* not spotted,
although the segment is sometimes spotted with two or more
pubescent spots..... Dasymutilla, Ashmead.